



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,492	05/16/2006	Dietrich Haarer	2007_1959	1654

7590 04/16/2008
WENDEROTH, LIND & PONACK, L.L.P.
Suite 800
2033 K Street, N.W.
Washington, DC 20006

EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
----------	--------------

2855

MAIL DATE	DELIVERY MODE
-----------	---------------

04/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,492	HAARER ET AL.	
	Examiner	Art Unit	
	Gail Verbitsky	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 5-11 are objected to because of the following informalities: They depend on now cancelled claim 3. Please note, that in the rejection on the merits, the Examiner considered that these claims are dependent on claim 1.

Claim 1: "in the form of L* " makes the claim language confusing because it is not clear what applicant means. Therefore, please note that in the rejection on the merits, the claims are rejected as best understood by the Examiner. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 9 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Haarer et al. (U.S. 76081364) [hereinafter Haarer].

Haarer discloses a device in the field of applicant's endeavor. Haarer discloses all the subject matter claimed by applicant including: TTI having photochromic/ photothermic properties subject to UV/ light coloration (certain color saturation), thus responsive to light by change in optical density.

For claim 9: The assembly comprising a light source (UV/ light) and a light detector (human eye detecting discoloration/ optical density).

With respect to “whereby”/“thereby”, as stated in claims: it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

Claims 16-19 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Simons (U.S. 6514462) in view of Tamura (U.S. 6382125).

Simons discloses a device/ method in the field of applicant's endeavor comprising time temperature indicator/ TTI/ label (machine readable pattern) attachable to a perishable food product (object). The method comprising determining of thermal history and thus, remaining life of the object.

Although it is very well known in the art of scanning data that the bar code reader can have a light source, Simons does not explicitly teach the light source/ predetermined stimulus, as stated in claims 18-19.

Tamura discloses a device/ method in the field of applicant's endeavor wherein time of thermal exposure (thermal history/ TTI) is determined by a machine reader/ bar code reader having a light/ beam source whose light either reflected or transmitted through a label on a food of interest or the label could be irradiated with wavelength absorbed/ transmitted or reflected by the label (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Simons, so as to have a bar code reader along with a laser beam/ light source, as taught by Tamura, so as to

enable the operator to make the bar code readable by the particular bar code reader, and make the data available to the operator.

With respect to “whereby”/“thereby”, as stated in claims: it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

Claims 1, 5-9, 11-14, 16-19 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura (U.S. 5382125) in view of Lawandy (U.S. 20030174263, filed 12/18/2002).

Tamura discloses a device/ method in the field of applicant's endeavor wherein time of thermal exposure (thermal history/ TTI) of a product (object) is determined by a machine reader/ bar code reader (optical probe) having a light/ beam source whose light either reflected or transmitted through a label on a food of interest or the label could be irradiated with wavelength absorbed/ transmitted or reflected by the label (abstract). It is inherent that the barcode reader would translate data in at least electrical or optical form. The barcode reader inherently comprising a communication utility (circuit) for translating data (reflected light or transmitter light, col. 2, lines 48) in an output signal. When the object was exposed to an extremely high temperature, the operator is alarmed. The object is initialized/ stimulated with an application of heat (or quench). The device is indicative of inappropriately high temperature for a longer than normal time. This would imply that the device is indicative, that the object does not have shelf life left (cannot be any longer on shelf) since it could be harmful for a consumer.

Tamura does not teach that the label could comprise photothermic/ photochromic material.

Lawandy discloses a device in the field of applicant's endeavor. Lawandy discloses a label: at least one thermochromic (invisible range) and photochromic (visible range) material, inherently, having photochromic properties (applied onto an article in the form of label) subject to light coloration (certain color saturation), thus responsive to light by change in optical density. When the assembly is stimulated with heat or light, it produces a barcode reader (optical detector/ optical probe) readable information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Tamura, so as to have the label comprising photochromic material, and have the reader adapted to read the data from such a label, in order to make the label usable with a plurality of visible and IR wavelength range and thus to make the device applicable with a plurality of products.

Tamura is not explicit about determining the shelf life/ remaining life of the object/ product.

With respect to "whereby"/"thereby", as stated in claims: it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

Claim 10 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura, Lawandy as applied to claims 6-9 above, and further in view of Zalameda et al. (U.S. 200301939870 [hereinafter Zalameda]).

Tamura and Lawandy disclose a device/ method in the field of applicant's endeavor as stated above. They teach that the device should be stimulated with heat/ light.

They do not teach the particular light source to illuminate the device, the light source being a flash lamp.

Zalameda teaches to determine time temperature data of a sample wherein the sample is irradiated with a flash lamp and reflected or transmitted light is detected by a light detector and it is indicative time-temperature profile of the sample.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Tamura and Lawandy, so as to irradiate the device with a flash lamp, so as to provide more heating of the device in order to obtain a detectable response/ reflection, as very well known in the art.

With respect to “whereby”/”thereby”, as stated in the claims: it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

Response to Arguments

Applicant's arguments filed 01/07/08 have been fully considered but they are not persuasive. The arguments are also moot in view of the new ground of rejection necessitated by the amendment.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Verbitsky whose telephone number is 571/ 272-2253. The examiner can normally be reached on 7:30 to 4:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571/ 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/579,492

Page 8

Art Unit: 2855

GKV

Gail Verbitsky
Primary Patent Examiner, TC 2800

April 01, 2008

/Gail Verbitsky/
Primary Examiner, Art Unit 2855